

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,852,775 B1
APPLICATION NO. : 10/018660
DATED : February 8, 2005
INVENTOR(S) : Wolfgang Soglowek

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1

Lines 41-47, delete "acceptable in the dental ----- pulpa." and insert the following paragraphs:

-- When using these materials the monomers are mixed with suitable initiator systems shortly before being processed, a pasty composition forming which cures by radical polymerisation. The original components, which contain monomer and initiator systems among others, can also be present in the form of pastes spatially separated from each other or also as a powder-liquid system.

Various initiator systems are used to start the radical polymerisation. It is necessary that, after the polymerisation has started, the processing time until the material is cured is long enough to give the dentist enough time for the material to be matched and made available for processing. At the same time, however, the setting time from the beginning of gelling to an extensive curing of the material is also to be as short as possible, as working is not possible during this phase and the waiting time for the dentist and the patient should be as short as possible.

An initiator system already known for a long time consists of an amine and a peroxide component, such as described e.g. in patent specification DE-C-975 072. The polymerisation is started in this case by the peroxide compound. A tertiary amine is used for example to accelerate the polymerisation. Another such system is also described by Albert GroB in "Quintessenz der Zahntechnik", 1977, 7, Paper No. 293. There, secondary or tertiary amines accelerate the decomposition of the peroxide component, which triggers the polymerisation of the material. The amine component is normally introduced into a paste, the so-called base paste. This base paste also contains the monomers provided for polymerisation. The peroxide component is introduced into a further paste, the so-called catalyst paste. The spatial separation of the two initiator components is necessary in order to avoid a premature curing of the monomer portions. Also described in the German patent specification DE-C-955 633 is a similar initiator system for the polymerisation of unsaturated hydrocarbons which contains heavy metals as well as an amine and a sulphone component. An initiator system with an organic peroxide compound and a tertiary aromatic amine as activator (accelerator) is also named in the European patent specification EP-13-374 824.

A disadvantage of the materials named is that the amines suitable for a favourable setting phase tend to discolour. These yellow-brown discolorations are however not acceptable in the dental field. In addition, tertiary aromatic amines can be used only under certain conditions due to their health risk. Furthermore, the increase in temperature during polymerisation of these systems, due to the exothermic reaction processes, causes problems. Too great a development of heat can lead to damage to the patient's pulpa. --

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 4

Line 2, after "14" insert -- , --.

Column 8

Line 46, in Claim 15, delete "0.5" and insert -- 0.05 --, therefor.

Signed and Sealed this

Twenty-seventh Day of May, 2008



JON W. DUDAS
Director of the United States Patent and Trademark Office